

# TRAITE DE COOPERATION EN MATIERE DE BREVETS



## PCT

REC'D 14 FEB 2005

### RAPPORT D'EXAMEN PRELIMINAIRE INTERNATIONAL

PCT

(article 36 et règle 70 du PCT)

|   |  |  |
|---|--|--|
| Référence du dossier du déposant ou du mandataire   | <b>POUR SUITE A DONNER</b> voir la notification de transmission du rapport d'examen préliminaire international (formulaire PCT/IPEA/416)                           |  |
| Demande internationale No.<br>PCT/EP 03/11020   | Date du dépôt international (jour/mois/année)<br>06.10.2003  | Date de priorité (jour/mois/année)<br>04.11.2002 |
| Classification internationale des brevets (CIB) ou à la fois classification nationale et CIB<br>G01R15/18   |  |  |
| Déposant<br>SIEMENS VDO AUTOMOTIVE et al.   |  |  |
| <p>1. Le présent rapport d'examen préliminaire international, établi par l'administration chargée de l'examen préliminaire international, est transmis au déposant conformément à l'article 36.</p> <p>2. Ce RAPPORT comprend 4 feuilles, y compris la présente feuille de couverture.</p> <p><input type="checkbox"/> Il est accompagné d'ANNEXES, c'est-à-dire de feuilles de la description, des revendications ou des dessins qui ont été modifiées et qui servent de base au présent rapport ou de feuilles contenant des rectifications faites auprès de l'administration chargée de l'examen préliminaire international (voir la règle 70.16 et l'instruction 607 des Instructions administratives du PCT).</p> <p>Ces annexes comprennent feuilles.</p>   |  |  |
| <p>3. Le présent rapport contient des indications et les pages correspondantes relatives aux points suivants :</p> <p>I <input checked="" type="checkbox"/> Base de l'opinion</p> <p>II <input type="checkbox"/> Priorité</p> <p>III <input type="checkbox"/> Absence de formulation d'opinion quant à la nouveauté, l'activité inventive et la possibilité d'application industrielle</p> <p>IV <input type="checkbox"/> Absence d'unité de l'invention</p> <p>V <input checked="" type="checkbox"/> Déclaration motivée selon la règle 66.2(a)(ii) quant à la nouveauté, l'activité inventive et la possibilité d'application industrielle; citations et explications à l'appui de cette déclaration</p> <p>VI <input type="checkbox"/> Certains documents cités</p> <p>VII <input type="checkbox"/> Irrégularités dans la demande internationale</p> <p>VIII <input type="checkbox"/> Observations relatives à la demande internationale</p> |  |  |
| Date de présentation de la demande d'examen préliminaire internationale<br>13.05.2004   | Date d'achèvement du présent rapport<br>10.02.2005   |  |
| Nom et adresse postale de l'administration chargée de l'examen préliminaire international<br><br>Office européen des brevets<br>D-80298 Munich<br>Tél. +49 89 2399 - 0 Tx: 523656 epmu d<br>Fax: +49 89 2399 - 4465  | Fonctionnaire autorisé<br>Iwansson, K<br>N° de téléphone +49 89 2399-7673<br> |  |

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**RAPPORT D'EXAMEN  
PRÉLIMINAIRE INTERNATIONAL**

Demande internationale n°

PCT/EP 03/11020

5. ☐ Le présent rapport a été formulé abstraction faite (de certaines) des modifications, qui ont été considérées comme allant au-delà de l'exposé de l'invention tel qu'il a été déposé, comme il est indiqué ci-après (règle 70.2(c)) :

*(Toute feuille de remplacement comportant des modifications de cette nature doit être indiquée au point 1 et annexée au présent rapport.)*

6. Observations complémentaires, le cas échéant :

**V. Déclaration motivée selon l'article 35(2) quant à la nouveauté, l'activité inventive et la possibilité d'application industrielle; citations et explications à l'appui de cette déclaration**

1. Déclaration
- |  |      |                |     |
|--|------|----------------|-----|
| Nouveauté                              | Oui: | Revendications | 1-8 |
|  | Non: | Revendications |     |
| Activité inventive                     | Oui: | Revendications | 1-8 |
|  | Non: | Revendications |     |
| Possibilité d'application industrielle | Oui: | Revendications | 1-8 |
|  | Non: | Revendications |     |

2. Citations et explications.

**voir feuille séparée**

**Concernant le point V****Déclaration motivée quant à la nouveauté, l'activité inventive et la possibilité d'application industrielle; citations et explications à l'appui de cette déclaration**

Il est fait référence au/x/ document/s/ suivant/s/ :

D1: DE 196 42 472 A (ABB RESEARCH LTD) 16 avril 1998 (1998-04-16)

Le document D1, qui est considéré comme étant l'état de la technique le plus proche de l'objet de la revendication 1, décrit (voir D1, revendication 1) un dispositif de mesure de l'intensité d'un courant du type à compensation dont l'objet de la revendication 1 diffère en ce que le moyen (3) sensible est sensible seulement au sens du champ magnétique résultant et commande en retour l'inversion du sens de circulation du courant (12) de compensation dans l'enroulement secondaire.

L'objet de la revendication 1 est donc nouveau (article 33(2) PCT).

Le problème que la présente invention se propose de résoudre peut donc être considéré comme comment réaliser un dispositif de mesure de l'intensité d'un courant du type à compensation à coût réduit et ayant une bonne précision de mesure.

La solution de ce problème proposée dans la revendication 1 de la présente demande est considérée comme impliquant une activité inventive (article 33(3) PCT), et ce pour les raisons suivantes : L'art antérieure ne comporte pas d'indication pouvant amener l'homme de métier à adapter le dispositif de D1 pour arriver au dispositif de mesure de l'intensité d'un courant du type à compensation selon la revendication 1.

Les revendications 2-8 dépendent de la revendication 1 et satisfont donc également, en tant que telles, aux conditions requises par le PCT en ce qui concerne la nouveauté et l'activité inventive.

7-4-05

533793

PATENT COOPERATION TREATY

PCT/EP2003/011020



Translation

## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

|  |   |   |
|--|---|---|
| Applicant's or agent's file reference<br>2002P18282WO                                      | <b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) |   |
| International application No.<br>PCT/EP2003/011020   | International filing date (day/month/year)<br>06 octobre 2003 (06.10.2003)  | Priority date (day/month/year)<br>04 novembre 2002 (04.11.2002) |
| International Patent Classification (IPC) or national classification and IPC<br>G01R 15/18 |   |   |
| Applicant<br>SIEMENS VDO AUTOMOTIVE  |   |   |

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of \_\_\_\_\_ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

|  |  |
|--|--|
| Date of submission of the demand<br>13 mai 2004 (13.05.2004) | Date of completion of this report<br>10 February 2005 (10.02.2005) |
| Name and mailing address of the IPEA/EP                      | Authorized officer   |
| Facsimile No.  | Telephone No.  |

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/011020

## I. Basis of the report

### 1. With regard to the elements of the international application:\*

- ☐ the international application as originally filed
- ☒ the description:  
 pages \_\_\_\_\_ 1-7 \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☒ the claims:  
 pages \_\_\_\_\_ 1-8 \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, as amended (together with any statement under Article 19  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☒ the drawings:  
 pages \_\_\_\_\_ 1/1 \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

### 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

### 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

### 4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/fig \_\_\_\_\_

### 5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

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## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

|                               |        |     |     |
|-------------------------------|--------|-----|-----|
| Novelty (N)                   | Claims | 1-8 | YES |
|                               | Claims |     | NO  |
| Inventive step (IS)           | Claims | 1-8 | YES |
|                               | Claims |     | NO  |
| Industrial applicability (IA) | Claims | 1-8 | YES |
|                               | Claims |     | NO  |

### 2. Citations and explanations

Reference is made to the following document:

D1: DE 196 42 472 A (ABB RESEARCH LTD) 16 April 1998  
(1998-04-16)

Document D1, which is considered the prior art closest to the subject matter of claim 1, describes (see D1, claim 1) a device for measuring the intensity of a compensation-type current, from which the subject matter of claim 1 differs in that the sensing means (3) is sensitive only to the direction of the resulting magnetic field and in turn inverts the direction of flow of the compensation current (12) in the secondary winding.

The subject matter of claim 1 is therefore novel (PCT Article 33(2)).

The problem which the present invention is designed to solve can therefore be considered as how to produce a device for measuring the intensity of a compensation-type current cheaply and accurately.

The solution to this problem, as proposed in claim 1 of the present application, is considered to involve an

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
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inventive step (PCT Article 33(3)), for the following reasons: the prior art does not contain any indication leading a person skilled in the art to adapt the device of D1 and arrive at the device for measuring the intensity of a compensation-type current according to claim 1.

Claims 2-8 are dependent on claim 1 and therefore, as such, also meet the PCT requirements of novelty and inventive step.



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